

**U.S. Department of Energy
Washington, D.C.**

POLICY

DOE P 454.1

Approved: 4-9-03

SUBJECT: USE OF INSTITUTIONAL CONTROLS

PURPOSE AND SCOPE:

This Policy delineates how the Department of Energy (DOE), including the National Nuclear Security Administration, will use institutional controls in the management of resources, facilities and properties under its control and to implement its programmatic responsibilities. The Policy will guide site-specific and programmatic decisions on DOE's own planning, maintenance and implementation of institutional controls, and address responsibilities related to DOE's role as a steward of Federal lands and properties, and identify activities that DOE needs to accomplish.

DOE uses a wide range of institutional controls as part of efforts to:

- appropriately limit access to, or uses of, land, facilities and other real and personal properties;
- protect the environment (including cultural and natural resources);
- maintain the physical safety and security of DOE facilities; and
- prevent or limit inadvertent human and environmental exposure to residual contaminants and other hazards.

The purpose of this Policy is to ensure that DOE programs:

- reaffirm a DOE-wide commitment to use institutional controls effectively;
- establish a consistent approach to the implementation, delegation, documentation, maintenance and reevaluation of institutional controls as an integral part of missions and operational activities;
- integrate the use of well-designed, effective, and reliable institutional controls with other tools to manage, monitor, and transfer lands and real and personal property under DOE control; and
- apply institutional controls in a cost-effective way and maximize the use of low-maintenance institutional controls to the extent possible.

The Office of Environment, Safety and Health is responsible for developing guidance for the implementation of this Policy, and will coordinate this effort with Headquarters and field offices. DOE line management including operations office managers, field office managers, the service center director and lead program secretarial offices have primary responsibility for implementing this Policy for properties under their control, for properties released or transferred from their control or for properties they accept for control or oversight. DOE line management is responsible for ensuring that institutional control needs are addressed as part of relevant

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integrated safety management and environmental management systems. DOE functional offices such as budget, chief information officer, legal, safety, and personal and real property management have staff responsibility for assisting line management with implementation of this policy, and related directives.

This Policy is only intended to improve the internal management of the Department, and is not intended to create any right or benefit, substantive or procedural, enforceable at law by a party against the Department of Energy. This policy does not alter or amend any institutional control under applicable law or enforceable agreement, and any terms, definitions, or implementation of this policy do not expand or modify the scope of requirements or authorities of existing laws and regulations.

BACKGROUND:

DOE is a responsible Federal land manager and steward of natural and cultural resources at DOE sites. DOE uses institutional controls to manage lands, facilities, materials and resources under its jurisdiction. In certain circumstances these institutional controls may be authorized by, or required as part of the decision process established by, various laws such as the Nuclear Waste Policy Act; the Atomic Energy Act; the Resource Conservation and Recovery Act; the Comprehensive Environmental Response, Compensation and Liability Act, or cultural resource management statutes. In other cases there are no specific statutory requirements, but DOE has decided to use institutional controls to supplement active remediation, pollution control, public and resource protection, physical security, or to bolster the integrity of engineered remedies.

Institutional controls may include administrative or legal controls, physical barriers or markers, and methods to preserve information and data and inform current and future generations of hazards and risks. Because of the different needs and objectives for institutional controls and the different types used throughout DOE, the term "institutional controls" is used in a broader context in this Policy than it may be used in internal and external regulatory requirements or policies established under individual statutes. This broader application of the term is necessary to encompass the diverse institutional controls used throughout DOE in a consistent yet flexible, policy framework. Additionally, differences among the various types of DOE facilities often lead to systematic tailoring of institutional controls.

DOE uses institutional controls as components in -

- protection of waste disposal operations,
- conduct of normal operations and site security,
- maintenance of storage facilities,
- conduct of restoration and cleanup programs, and
- management of natural and cultural resources.

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In situations where unrestricted use or unrestricted release of property is not desirable, practical, or possible, institutional controls are necessary and important to DOE efforts to fulfill its programmatic responsibilities to protect human health and the environment (including natural and cultural resources). It is DOE policy to use institutional controls as essential components of a defense-in-depth strategy that uses multiple, relatively independent layers of safety to protect human health and the environment (including natural and cultural resources). This strategy uses a graded approach to attain a level of protection appropriate to the risks involved. DOE will use a graded approach to determine what types and levels of protective measures (e.g., physical, administrative, etc.) should be used.

The Department will implement institutional controls, along with other mitigating or preventive measures as necessary, to provide a reasonable expectation that if one control temporarily fails, other controls will be in place, or actions will be taken, to mitigate significant consequences of the failure. Institutional controls are not to be used to circumvent or substitute for permanent solutions when such solutions are reasonably achievable. Institutional controls will not be applied, or will be terminated, when DOE determines that such controls are not necessary or required.

Implementation Goals:

- DOE will apply and implement institutional controls in an integrated manner to ensure that:
- the purpose for controls is identified clearly, need for the controls is well established and has been considered early in planning processes consistent with integrated safety management, and both purpose and need are documented and made available to the public as appropriate and allowed by law;
 - mechanisms are in place to ensure controls are effective, implemented as planned, properly maintained, inventoried, periodically reevaluated, and modified as necessary to reflect changes in conditions, needs or technological advancements;
 - where multiple institutional control needs or goals exist at the same site, the institutional controls address relevant requirements or goals in an integrated cost effective and protective manner;
 - actions are taken to maintain long-term site stability, minimize reliance on institutional controls, and keep maintenance requirements for such controls as low as practicable; and
 - decisions to terminate or reduce controls (e.g., because of mitigating actions, scientific advances, natural attenuation, or changes in policy or programmatic needs) are documented and publicly available, as appropriate.

DOE will maintain the institutional controls as long as necessary to perform their intended protective purposes and seek sufficient funds.

Property Issues:

The need for institutional controls on real and personal property may be related directly to the property that requires control (e.g., the presence of residual contamination, waste or cultural resources) or may be an indirect result of a requirement associated with neighboring activities (e.g., land is required to be under DOE control because of conditions specified in a DOE disposal authorization or because the land is used as a buffer in a safety analysis). Institutional controls may be necessary for property that DOE will retain indefinitely, for property under consideration for transfer, and for property that has actually been transferred.

Before DOE authorizes transfer of property, there will be a reasonable expectation that:

- all necessary institutional controls can be maintained after the transfer, and
- the new owner (whether a DOE or non-DOE entity) understands and is capable of meeting its institutional control responsibilities.

DOE will determine whether responsibility for required institutional controls on transferred property can be maintained by subsequent owners consistent with applicable law. If this implementation responsibility cannot be reliably assured, then DOE will retain necessary responsibility and authority for the institutional controls, including continued ownership of the property if necessary. The respective responsibilities of DOE and the new owner for any required institutional controls will be documented and communicated to all directly involved parties at the time of transfer. Before accepting property from non-DOE entities, DOE will determine whether it can accept continuing responsibility for previously or newly established institutional controls.

For properties that it does not own or directly control (e.g., uranium mill tailings remedial action properties needing controls to restrict access to ground water), DOE will arrange for appropriate institutional controls, to the extent that DOE is required to take such actions. Actions to ensure that these institutional controls are durable may involve coordination with State, local, or tribal governments and other entities having jurisdiction over the properties, or where appropriate, the use of DOE authorities for the protection of public health and safety, the environment, and national security.

BY ORDER OF THE SECRETARY OF ENERGY:



KYLE E. McSLARROW
Deputy Secretary